

BELMONT COMMUNITY PATH FEASIBILITY STUDY

Public Meeting #1 -
Kick-Off/Workshop

September 21, 2016



AGENDA

- | | |
|----------------------------|------------------------|
| 1. Introduction | Russell Leino, CPIAC |
| 2. Background/Project Team | John Shevlin, Pare |
| 3. Feasibility Study | Amy Archer, Pare |
| 4. Data Collection | Tim Thomson, Pare |
| 5. Standards of Design | Amy Archer, Pare |
| 6. Public Engagement | Kathleen Fasser, k3-LA |
| 7. Workshop | Group Activity |
| 8. What We've Heard | Consultant Team |
| 9. Next Steps | Amy Archer, Pare |

PATH HISTORY

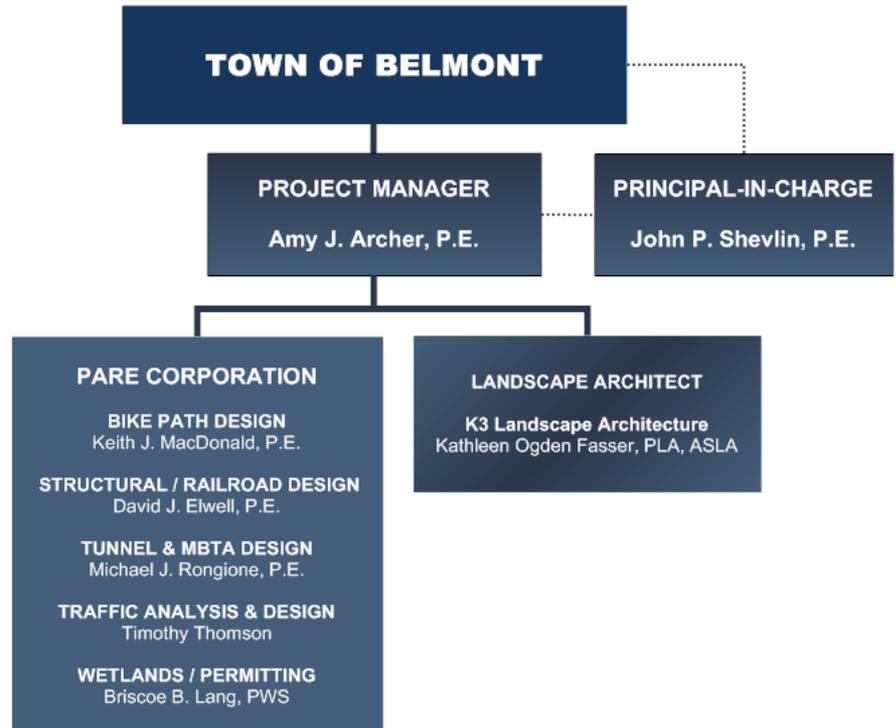
- **1994:** With potential for funding, the BOS formed the Bikeway Planning Committee
- **1997:** Proposal for a multi-use path through Belmont started to advance as part of the Mass Central Rail Trail (MCRT)
- **1997:** Wallace Floyd Group prepared the Belmont Bikeway Preliminary Feasibility Analysis
- **1998:** MCRT was stalled due to lack of funding and lack of participation from communities along route; some communities including Cambridge proceeded independently
- **2010:** Construction began on Fitchburg Cutoff Path

PATH HISTORY

- **2010:** DCR signed 99 year lease for abandoned CMRR corridor (Waltham to Berlin)
- **2012:** Belmont Bikeway Trail Alignment Study conducted by Metropolitan Area Planning Council (MAPC)
- **2012:** BOS elected CPAC to review previous efforts, obtain public input and recommend alternatives for path
- **2014:** CPAC delivered final report and recommendations
- **2016:** BOS elected CPIAC to enlist and facilitate the use of a consultant to evaluate the proposed recommendations

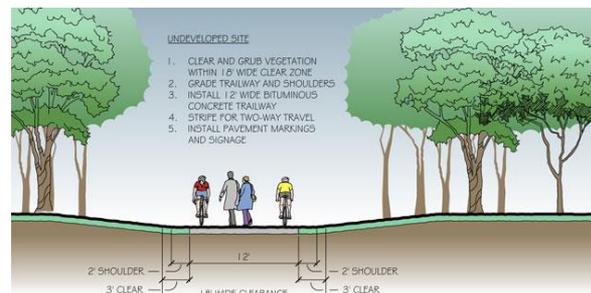
PROJECT TEAM

- Pare Corporation – Prime Consultant
 - Bike path design
 - Structural / railroad design
 - Tunnel & MBTA Design
 - Traffic engineering
 - Wetlands / permitting
- K3 Landscape Architecture
 - Community engagement and landscape architecture



RELEVANT EXPERIENCE

- Understanding of issues
- Nearly 200 miles of study and/or design of trails
- MBTA / MassDOT / MADCR experience
- Solid understanding of regulatory requirements
- Experience in finding funding opportunities
- Similar path/trail Feasibility Study experience



OFF ROAD - Treatment Level 3

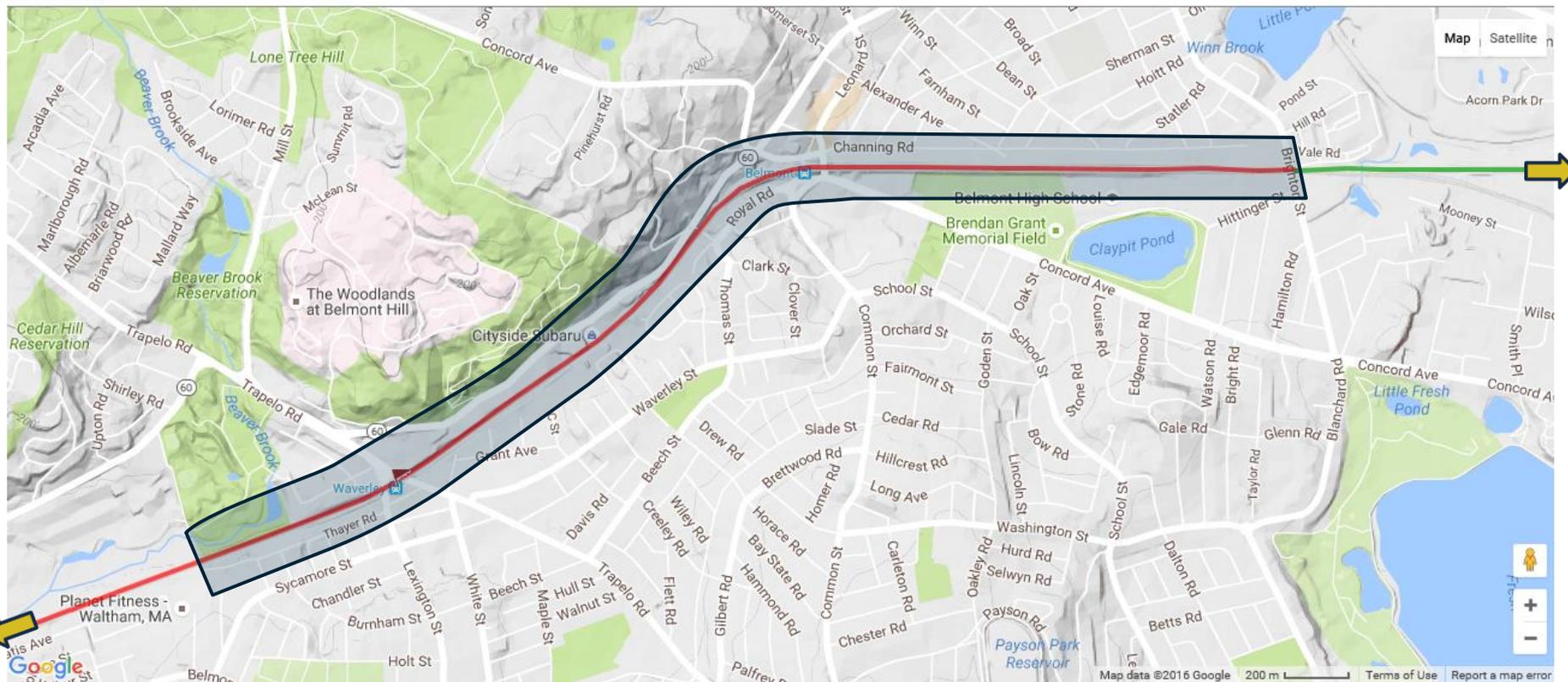
PURPOSE

To recommend a **preferred alternative** for a non-motorized, **multi-use path** through Belmont that will **serve** the Town's **residents as well as** “fill the gap” along **the Mass Central Rail Trail** (MCRT) between Waltham and Cambridge using the alignments from the CPAC as a base.

PROPOSED PATH - MCRT

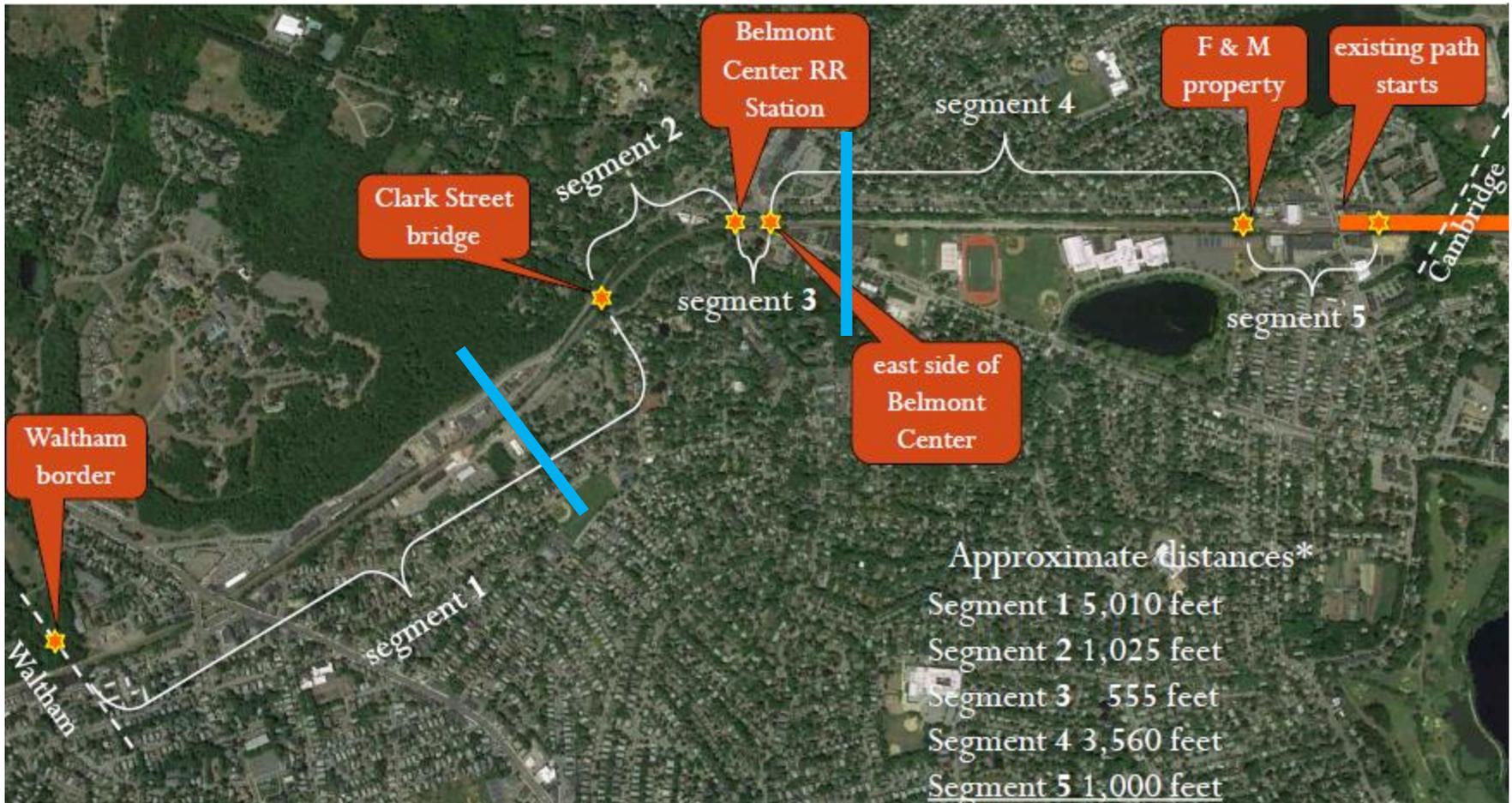
Options ▾

Mass Central Rail Trail



104 miles—connecting 24 communities—Boston to Northampton

PROPOSED PATH - CPAC



GOALS

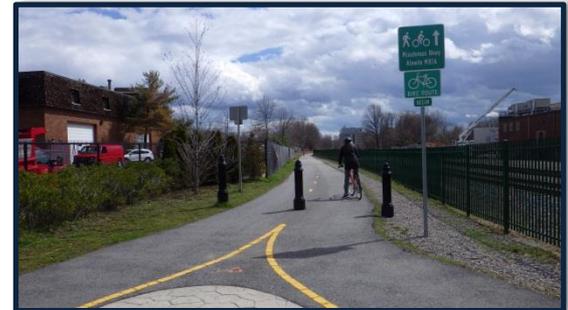
■ ADVANCE

- Convert CPAC alignments to conceptual design
- Include connections and access
- Determine need for structures – retention and crossings
- Identify various path attributes/amenities

■ EVALUATE

- Environmental – parks, wetlands, species
- Social – serviceability
- Land – public vs. private, historic
- Cost – capital and funding

■ ADVISE AND RECOMMEND



DATA COLLECTION

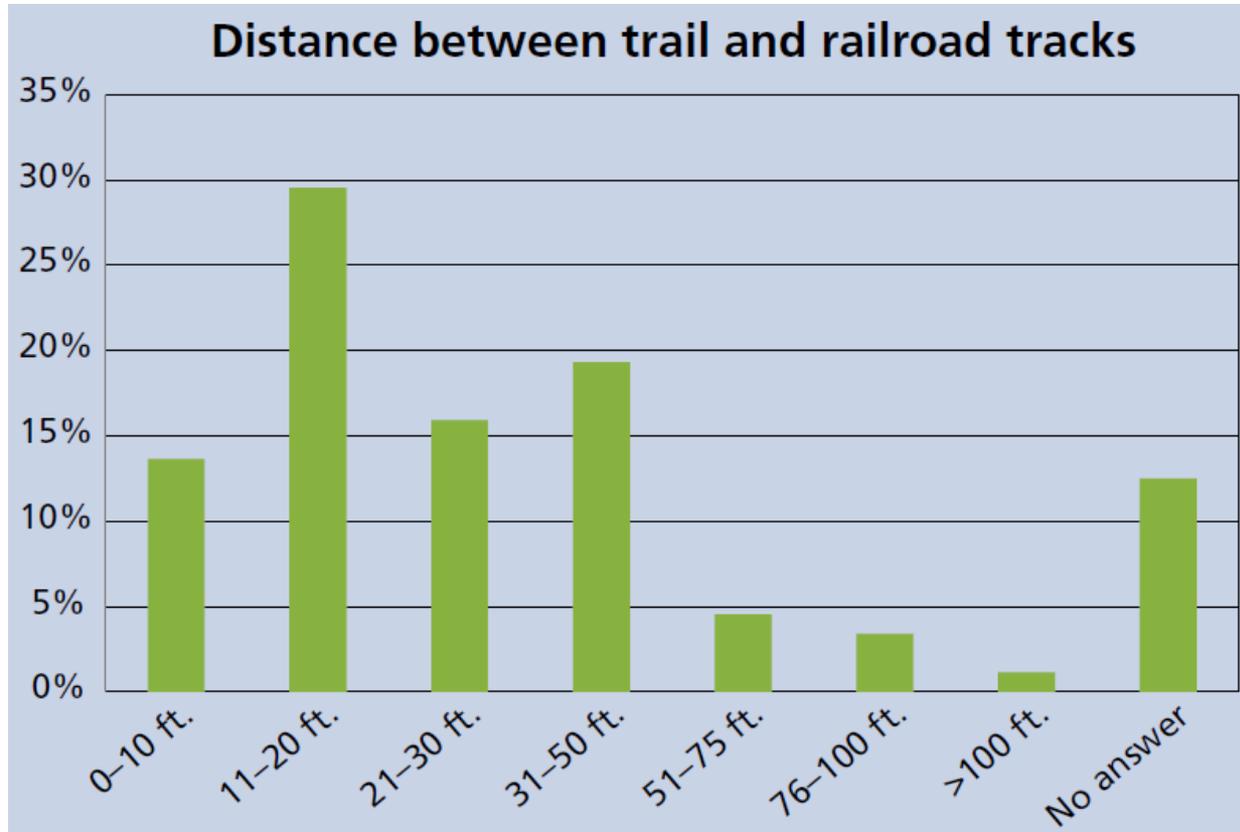
- ✓ Review of past studies, presentations, reports and surveys
- ✓ Coordination with BOS, CPIAC and Town departments/committees
- ✓ Extensive field walks
- ✓ Coordination with MBTA



AASHTO GUIDELINES

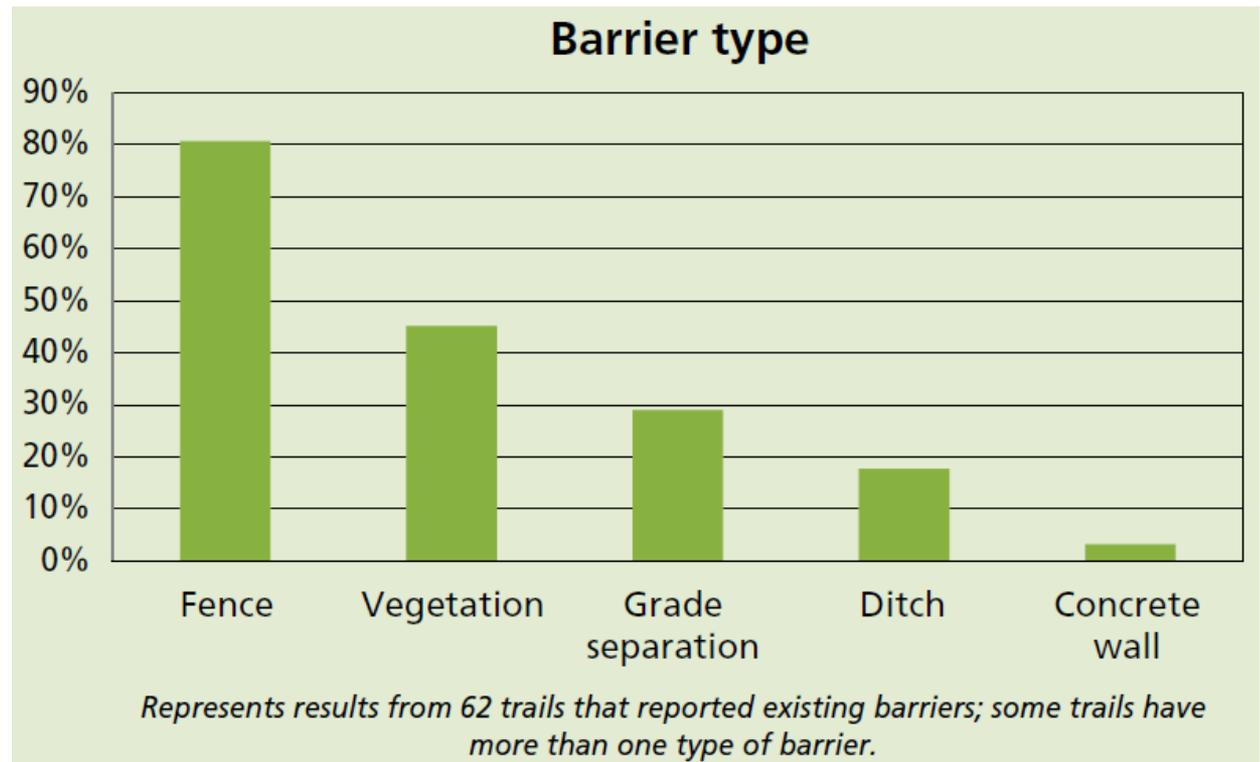
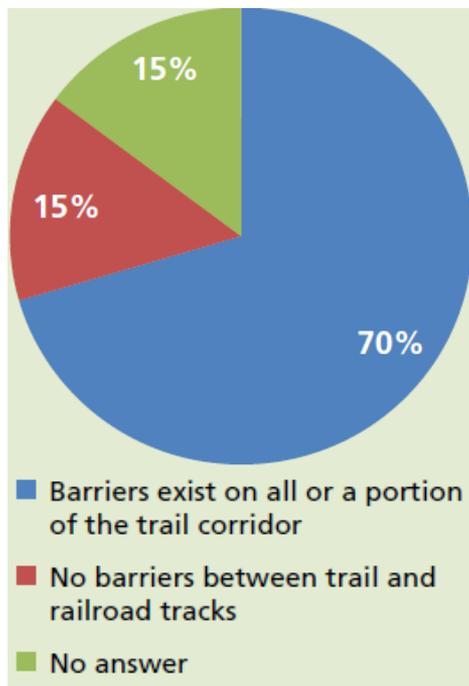
Elements of Design	Standard Value
Width	10' – 14' (11' for passing, 8' in pinch)
Shoulder	3' – 5'
Object Offset	2' minimum
Vertical Clearance	8' minimum (10' recommended)
Design Speed	18 mph
Curve Radius	60' minimum
Cross Slope	2% maximum (1% recommended)
Running Grade	5% recommended maximum (ADA)
Structures	Bridges preferred to underpasses

RAILS WITH TRAILS CROSS COUNTRY



Source - *America's Rails-with-Trails: A Resource for Planners, Agencies and Advocates on Trails Along Active Railroad Corridors* by the rails-to-trails conservancy

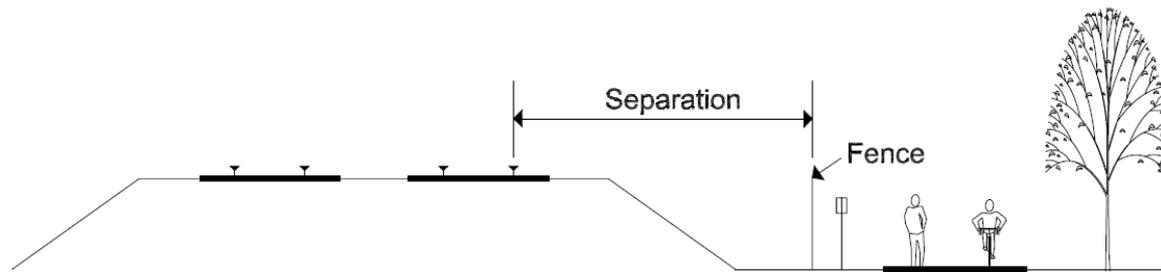
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MASSDOT GUIDELINES

Exhibit 11-17
Separation Between Track and Path



Source: Adapted from the VTrans Pedestrian and Bicycle Facility Planning and Design Manual

Exhibit 11-18
Recommended Separation between Active Rail Lines and Paths

Type of Rail Operation	Setting Characteristics	Recommended Minimum Separation
High Volume/ High Speed 11 trains or more per day Max speed over 45 mph	Typical Conditions	25 feet with fence, 15 feet with a solid barrier
	Constrained Areas (cut/fill, bridges, etc.)	15 feet with fence or other physical barrier
	Vertical Separation of at least 10 feet	20 feet

MBTA REQUIREMENTS



- Max speed through Belmont - >45 mph
- Required running offset - 25' with fence
- Allowed minimum at pinch - 15' with barrier
- Required vertical clearance - 22'-6" top of rail to bottom of structure
- Ability to tunnel under? - Yes, currently do culvert work; cut and cover on weekends
- Required tunnel depth - Location specific due to presence of underground utilities, power lines, other buried apparatus
- Ability to cover over station - Not opposed if done properly (ventilation/lighting)



PUBLIC ENGAGEMENT PLAN



Describe and outline public engagement efforts that will inform the Study

ENGAGEMENT GOAL

Level of Engagement: Collaborate (See page 6, Stakeholder Roles and Responsibilities)

	Inform	Consult	Collaborate	Partner
Engagement Goal:	To provide stakeholders with factual, balanced, and timely information to help them understand the project.	To obtain stakeholder feedback on project analysis, alternatives, or decisions.	To work directly with the public throughout the process to ensure that perspectives are consistently understood, considered, and reflected in project decisions.	To partner with stakeholders in each aspect of decision making in order to develop and implement collaborative project solutions.

PUBLIC ENGAGEMENT PLAN



STAKEHOLDERS

- Town residents, including:
 - Youth and students
 - Families
 - Seniors and older adults
- Trail and facility users:
 - Current users
 - Potential users
 - Non-resident users
 - Commuters
 - Sports enthusiasts
- Town Departments' staff and Commissions
- Schools and school districts
- Other community-based organizations (CBOs)
- Advocacy organizations and interest groups
- Representatives from traditional and online media
- Local employers
- Non-profit organizations

PUBLIC ENGAGEMENT PLAN



OUTREACH STRATEGIES

- Public Information
- Town Project Website
- Intercept Events
- Public Meetings
- Meetings with
Departments & Commissions
- Workshop
- Community Survey



PUBLIC ENGAGEMENT PLAN



ROLES & RESPONSIBILITIES

engage in the process in a manner that promotes **respectful civil discourse** and enhances mutual understanding of all stakeholder viewpoints.

WORKSHOP STATIONS

■ Path Context Map

- Compilation of aerial, GIS data, existing Town amenities and consultant observations
- Add your local knowledge relative to potential path alignments



WORKSHOP STATIONS

■ What is Most Important?

- Guide development of potential evaluation criteria
- Provide input on what you think is most important for the path

WHAT IS MOST IMPORTANT? Environmental/Regulatory Traits			
Belmont Community Path Feasibility Study			
			
Place ONE DOT in ONE BOX to the RIGHT of each TRAIT			
WHAT SHOULD BE THE IMPORTANCE OF THE FOLLOWING PATH TRAITS WHEN RANKING THE ALTERNATIVE PATH ALIGNMENTS?	Least important	Important	Most important
Avoid or protect cultural resources and fragile environmental areas			
Minimize need for environmental permits			
Use existing open spaces when feasible			
Take advantage of the natural topography			

WORKSHOP STATIONS

■ Attribute Preferences

- Given examples of attributes that may be applicable to the path, which do you prefer?

ATTRIBUTE PREFERENCES: Path Edge Treatment

1 or 2

PLACE DOT HERE FOR 1

PLACE DOT HERE FOR 2

OPTION 1: OPEN ROOF LAWN AND/OR VEGGIE BEDS TO 4'-0" FROM EDGE OF PATH. 2'-0" FROM EDGE OF PATH.

OPTION 2: OPEN ROOF LAWN AND/OR VEGGIE BEDS TO 4'-0" FROM EDGE OF PATH. 2'-0" FROM EDGE OF PATH.

OPTION 3: OPEN ROOF LAWN AND/OR VEGGIE BEDS TO 4'-0" FROM EDGE OF PATH. 2'-0" FROM EDGE OF PATH.

OPTION 4: OPEN ROOF LAWN AND/OR VEGGIE BEDS TO 4'-0" FROM EDGE OF PATH. 2'-0" FROM EDGE OF PATH.

The diagram illustrates two path edge treatment options. Option 1 shows a path with a red dot indicating a preference point, a cross-section with a lawn and veggie beds, and a perspective view. Option 2 shows a similar setup but with a different cross-section and perspective view. Both options include a 'PLACE DOT HERE FOR 1' and 'PLACE DOT HERE FOR 2' instruction.

ATTRIBUTE PREFERENCES — Alignment

LINEAR

CURVILINEAR

PLACE DOT HERE FOR 3

PLACE DOT HERE FOR 4

The diagram illustrates two path alignment options. The 'LINEAR' option shows a straight path with a fence and trees, and a preference dot. The 'CURVILINEAR' option shows a curved path with trees and a fence, and a preference dot. Both options include a 'PLACE DOT HERE FOR 3' and 'PLACE DOT HERE FOR 4' instruction.

WORKSHOP STATIONS

- **Path Context Map** – Add your local knowledge



- **What is Most Important?**

- Rank the importance of each trait

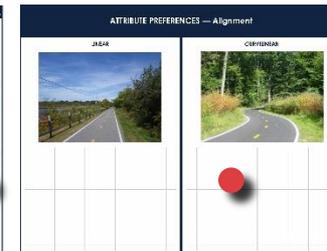
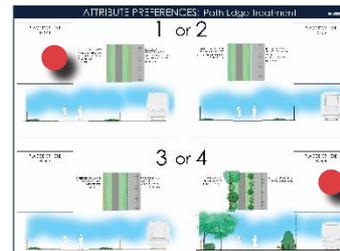
WHAT IS MOST IMPORTANT? Belmont Community Path Feasibility Study
Environmental/Regulatory Traits

Page 53 of 200 | Appendix to the Final EIR (Page 184)

WHAT SHOULD BE THE IMPORTANCE OF THE FOLLOWING PATH TRAITS WHEN RANKING THE ALTERNATIVE PATH ALIGNMENTS?	Least Important	Important	Most Important
Avoid or protect cultural resources and fragile environmental areas			●
Minimize need for environmental permits		●	
Use existing open spaces when feasible		●	
Take advantage of the natural topography	●		

- **Attribute Preferences**

- Which do you prefer?



WHAT WE'VE HEARD

■ Path Context Map



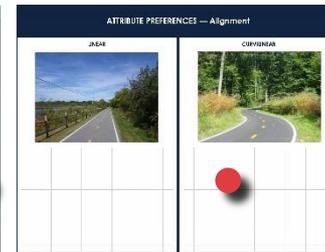
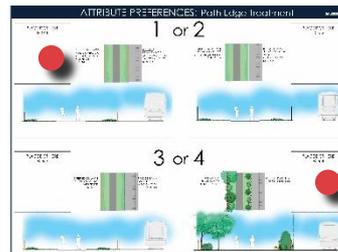
■ What is Most Important?

WHAT IS MOST IMPORTANT? Belmont Community Path Feasibility Study
Environmental/Regulatory Traits

Page 555-20 | F-028-10X | 10/14/2014

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Avoid or protect cultural resources and fragile environmental areas			●
Minimize need for environmental permits		●	
Use existing open spaces when feasible		●	
Take advantage of the natural topography	●		

■ Attribute Preferences



WHAT'S NEXT?

- **Walk the trail with us:**
 - East End – October 1
 - West End – October 15

- **Consultant Team advance alternatives to conceptual design**

- **Design presentations and discussion:**
 - Segment 1 (Waverley to Housing Authority) – October 26
 - Segment 2 (Housing Authority to High School) – November 2
 - Segment 3 (High School to Fitchburg) – November 9
 - Follow-up/Hot Topics (from segment meetings) – November 30

<http://www.belmont-ma.gov/community-path-implementation-advisory-committee>